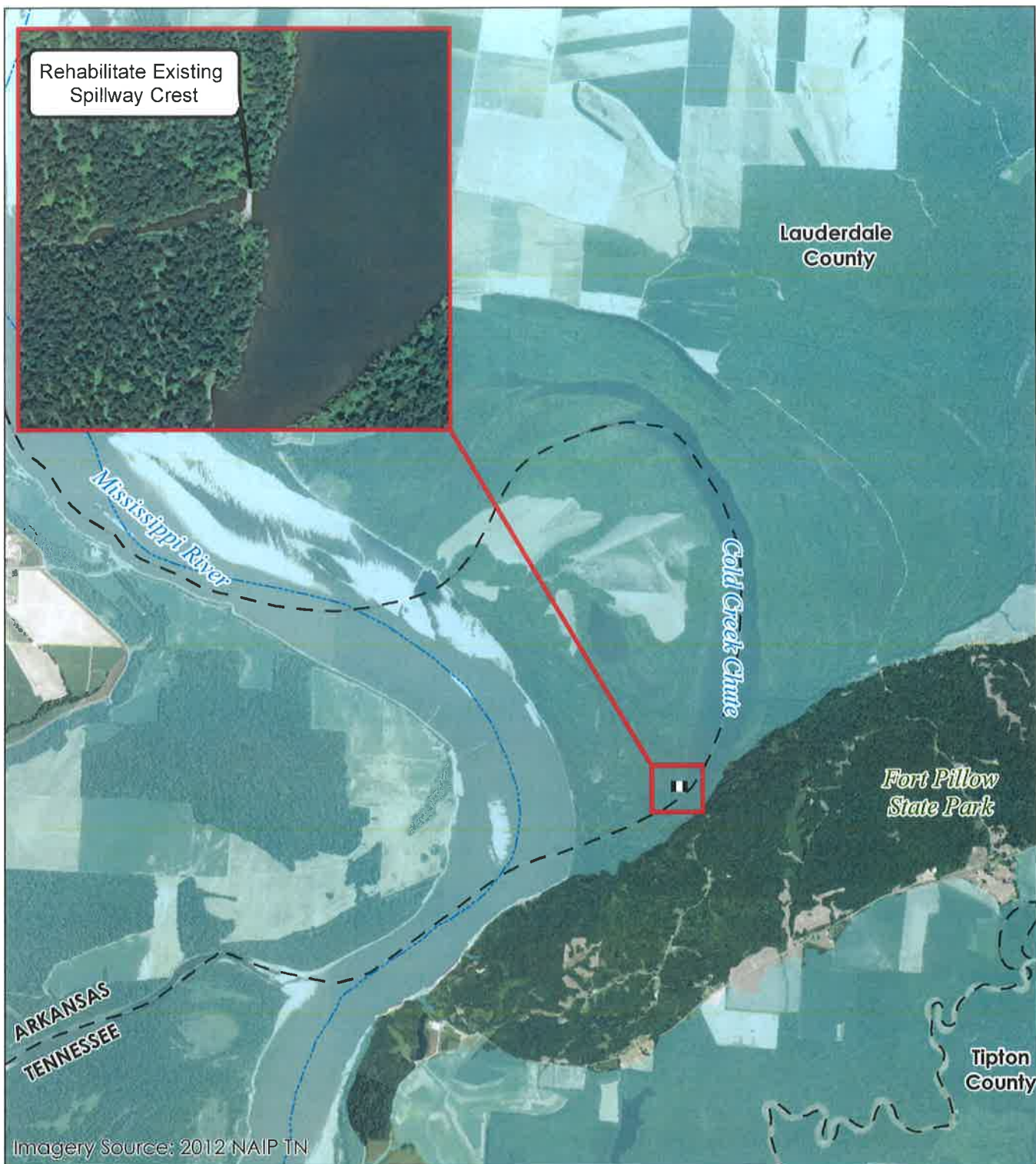


Project 11 – Cold Creek Chute Restoration:

Cold Creek Chute is an abandoned Mississippi River Oxbow Lake that is a key component of the rural economy in western Lauderdale County. This lake is used for recreation, including fishing and hunting. A rock spillway near the southwest corner of the lake controls summer water levels. The spillway, which has been in place for over 30 years, was installed and is maintained by the Tennessee Wildlife Resources Agency. During the 2011 Mississippi River Flood Event the spillway failed at its northern abutment. Minor repairs were made; however, subsequent flood events resulted in a permanent breach in the north end of the spillway. Failure of this structure has resulted in water levels that are approximately two feet below the previous normal pool elevation. This prevents the local population from accessing the lake for sustenance fishing and recreational opportunities.

The proposed improvement involves repair of the spillway to raise the water surface elevation in Cold Creek Chute such that it is equal to the water surface elevation prior to the 2011 flood. This will be accomplished by repairing and keying the north end of the structure into the north abutment and placing large riprap over the remaining spillway material. Depending on the construction method, semi-impermeable material would likely be used in the “core” of the structure to allow the water to pond upstream of the new spillway and effectively raise the pool elevation. The new riprap will be larger than the existing riprap and will be sized to more effectively resist erosion during large flood events on the Mississippi River. The larger riprap will be placed over the existing and raised portions of the embankment to effectively armor the spillway from erosion and maintain the permanent pool elevation in the future. The surficial riprap will also be grouted to provide additional reinforcement. With the raised pool elevation, local populations will again be able to utilize Cold Creek Chute for sustenance fishing and other recreational uses. While this is a small project, it has a significant impact for residents who regularly use the area for fishing.



Legend

- Cold Creek Chute Spillway
- Stream
- FEMA 1% Annual Chance Floodplain
- Jurisdictional Boundary



0 0.5 1 Miles

RURAL BY NATURE

Project 11: Cold Creek Chute Restoration